

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Previously Presented) A microscope (2) having a configuration of a conventional microscope, comprising:  
an optical unit (12) defining an optical axis; and  
at least one objective (22) that can be arranged in the optical axis (16) and is configured as an electron beam objective (28, 42),  
said electron beam objective having a size comparable to an objective of a conventional light microscope.
2. (Original) The microscope (2) as defined in Claim 1, comprising:  
multiple objectives (18, 22) arranged on a revolving nosepiece (20), at least one objective (22) being configured as an electron beam objective (28, 42).
3. (Original) The microscope (2) as defined in Claim 1, comprising:  
an electron beam objective (28, 42) comprising an electron microscope column (32) which is arranged in a housing (30) symmetrically about the optical axis (16).
4. (Original) The microscope (2) as defined in Claim 3, comprising:  
an electron beam objective (28) forming a hermetic unit with a sample (26) being examined.
5. (Previously Presented) The microscope (2) as defined in Claim 1, comprising:  
the electron beam objective (42) being spaced slightly away from the surface of a sample (26) being examined whereby approximately ambient air pressure exists between the electron beam objective (42) and the sample (26).
6. (Previously Presented) A microscope (2) with an optical unit (12) defining an optical axis, comprising:

at least one objective (22) that can be arranged in the optical axis (16) and is configured as an electron beam objective (28, 42),  
the electron beam objective (42) being spaced slightly away from the surface of a sample (26) being examined whereby approximately ambient air pressure exists between the electron beam objective (42) and the sample (26), and  
the electron beam objective (42) comprising a first housing (44) that encloses a second housing (48), whereby an electron microscope column (32) is arranged in the second housing (48) symmetrically about the optical axis (16), and whereby a higher air pressure is existing in the first housing (44) than in the second housing (48).

7. (Currently Amended) The microscope (2) as defined in Claim 6, comprising:  
a first vacuum device,  
a first connection (45) between the first housing (44) and said first vacuum device,  
a further vacuum unit,  
and a second connection (49) between the second housing (48) ~~[[to]]~~ and said further vacuum unit.
8. (Currently Amended) The microscope (2) as defined in Claim 6, comprising:  
~~[[an]]~~ a first opening (46) of the first housing (44) for transmitting the electron beam, and  
~~[[an]]~~ a second opening (52) of the second housing (48) for transmitting the electron beam,  
said first opening (46) and said second opening (52) being arranged symmetrically about the optical axis (16).
9. (Original) The microscope (2) as defined in Claim 5, comprising:  
a single housing (62) of the electron beam objective comprising an opening (64) for the electron beam, said opening (64) being sealed hermetically with a membrane (66) that is transparent to electron beams.
10. (Canceled)
11. (Previously Presented) A microscope comprising:  
an optical unit defining an optical axis;  
a revolveable nosepiece connected to the optical unit and configured to support a plurality of objectives and to arrange at least one of said objectives in the optical axis; and

an electron beam objective supported by the nosepiece.

12. (Previously Presented) The microscope as in claim 11, further comprising a light objective supported by the nosepiece.
13. (Previously Presented) An electron beam objective comprising:
  - a first housing;
  - a second housing enclosed by the first housing;
  - an electron microscope column arranged in the second housing symmetrically about an optical axis,
  - wherein the electron beam objective is configured so that the second housing has a second pressure lower than a first pressure of the first housing.
14. (Previously Presented) The microscope as in claim 13, wherein the first pressure is less than ambient air pressure.
15. (New) A microscope comprising:
  - a foot element;
  - a column connected to the foot element;
  - an arm connected at one end to the column;
  - an optical unit connected to an opposite end of the arm, wherein the foot element, column, arm, and optical unit have a configuration of a conventional microscope, and wherein the optical unit defines an optical axis; and
  - at least one objective that can be arranged in the optical axis and is configured as an electron beam objective,
  - said electron beam objective having a size comparable to an objective of a conventional light microscope.